Reflecion Exercises 1 and 2

Reflection Exercise #1

The purpose of a reflection exercise is to step back and reflect on your learning in the course. Pedagogical research shows that building an internal meta-level model of the material is valuable for understanding and long-term retention. Equally, you understand something about *yourself*: how do you best learn? what does it take for you to "get" something?

The material for Reflection Exercise #1 will be Modules 1, 3, and 4 (We'll skip Module 2 because it's more straightforward and focused on the planning problem).

For the purpose of examining one's learning, let's divide the learning opportunities in these modules into three categories:

- *Learning by programming or reading code*. This is when you've made a leap in understanding because you wrote some code or because you understood something better by seeing the concept in code.
- *Learning with a visual demo*. In this case, you merely use a program (without caring about the code) to either produce some numbers or a graph, and it's the graph or data that causes the learning.
- *Learning the traditional math way*. In traditional math, you learn by understanding math symbols and equations via algebra and via their meaning.

The goal of this exercise:

- From Modules 1, 3 and 4, pick *two* examples of concepts that you learned mostly by programming or reading code.
- Then, pick two examples where the primary insight came from a visual demo (the second category above).
- And, finally, pick two examples where learning mostly occured the third (traditional math) way.
- For each of these six, you will need to:
    1. Identify the Module and Section number, and if relevant, the in-class exercise number.
    2. Explain in a 4-5 sentences, perhaps with an accompanying figure, your rationale for why you picked each example in each category.

What to submit:

- A single PDF called `reflection1.pdf` with six parts labeled "My example #1", "My example#2" etc.
- For each example, identify the module/section number, and write your rationale.

Reflection Exercise #2 (due after Module 8)

This second reflection exercise is identical to the first one except that it focuses on Modules 6-8, and you will submit a single PDF called `reflection2.pdf` with six new examples (from modules 6-8).